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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/824,920

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Paul E. Bender

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QUALCOMM INCORPORATED
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EXAMINER

TRINH, SONNY

ART UNIT

PAPER NUMBER

2618

NOTIFICATION DATE

DELIVERY MODE

05/07/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/824,920	Applicant(s) BENDER ET AL.	
	Examiner Sonny TRINH	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-49 and 55-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-39, 43, 46-49 and 55-60 is/are rejected.
- 7) ☒ Claim(s) 40-42, 44 and 45 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's election without traverse of Group I (claims 31-49 and 55-60) in the reply filed on 03/07/08 is acknowledged. It is noted that there is another set of claim filed on the same day (03/07/08) which incorrectly renumbered claims 53-60 to 1, 53-59. The Examiner assumes that this set is filed by mistake and only consider the other set of claim that have not been renumbered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claim 43** recites the limitation "the DRC" in line. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. **Claims 31, 33-38, 46-47, 49, 60** are rejected under 35 U.S.C. 102(a) as being anticipated by Tiedemann, Jr. et al. (hereinafter "Tiedemann"; U.S. Patent Nuber 6,256,301).

Regarding **claim 31**, with reference to figure 1, Tiedemann discloses a mobile station (figure 1, mobile 12) operable to communicate wirelessly with a base station (figure 1, base station 14), the mobile station comprising a processor (inherent) configured to select an access channel and a mobile termination block configured to transmit a pilot preamble and a traffic channel request to a base station on the selected access channel (figure 2 A, column 7 lines 3-12, figure 5, column 10 lines 15-29), the traffic channel request comprising a mobile station identifier (column 4 line 65 to column 5 line 36), and transmit data on a traffic channel identified by the mobile station identifier to the base station without waiting to receive a traffic channel assignment from the base station (column 1 line 29 to column 2 line 37).

Regarding **claim 33**, Tiedemann further discloses that the processor is configured to randomly select the access channel from a plurality of access channels (column 1 lines 47-65, column 3 lines 3-16).

Regarding **claim 34**, since the mobile station selects an access channel from a list of forward link channel assignment channel (column 4 lines 23-33), it is inherent that the list of access channels are advertised by the base station.

Regarding **claim 35**, Tiedemann further discloses that the pilot preamble and traffic channel request are masked with a long code access channel cover such as the CDMA (column 14 lines 32-44).

Regarding **claim 36**, Tiedemann further discloses that the pilot preamble comprises a sequence of data that is detectable by the base station (column 5 lines 37-61, column 9 lines 1-9).

Regarding **claim 37**, it is inherent that the mobile station must be registered with the base station in order to receive the identifier and to communicate with the base station for accounting and billing purposes.

Regarding **claim 38**, Tiedemann further discloses that the traffic channel request further comprises a transaction identifier, a reference pilot, a pilot strength indicator, and a timer status field (column 14 line 43 to column 15 line 12).

Regarding **claim 46**, Tiedemann further discloses that the mobile receives a traffic channel assignment message transmitted by the base station (column 14 line 63 to column 15 line 56).

Regarding **claim 47**, Tiedemann further discloses that the mobile termination block is configured to use Code Division Multiple Access (CDMA) to process data for transmission to the base station (column 14 lines 32-44).

Regarding **claim 49**, Tiedemann further discloses that the processor is further configured to select a power control group from a plurality of power control groups for the mobile termination block to transmit data (column 9 line 25 to column 10 line 62).

Regarding **claim 60**, this claim merely reflects the means as opposed to the apparatus claim of claim 1 and is therefore rejected for the same reasons.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 32, 39** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann in view of Vilmur et al. (hereinafter "Vilmur"; U.S. Patent Number 5,590,177).

Regarding **claim 32**, Tiedemann discloses the invention but does not disclose that the processor is further configured to determine which base station is sending a pilot signal which is stronger than any other pilot signal received by the mobile station and select an access channel to send the a pilot preamble and traffic channel request to the determined base station.

In an analogous art, Vilmur discloses a method for preventing a dropped call during a handoff in a radiotelephone system. Vilmur further discloses that the mobile station sends a connect request to the base station with the strongest pilot signal (claims 7, 15).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to incorporate strong pilot signal selection, as taught by Vilmur to the system of Tiedemann. The motivation for doing so would be to make sure that the connection with have a strong signal to prevent call(s) from being disconnected / dropped.

Regarding **claim 39**, since the mobile station identifies the base stations with the strongest pilot signal as discussed in claim 32 above, it is obvious that the mobile identities of all base stations having received signal strengths exceeding a threshold.

8. **Claim 48** is rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann in view of Odenwalder (hereinafter "Odenwalder"; U.S. Patent Number 5,926,500).

Regarding **claim 48**, Tiedemann discloses the invention but does not disclose the mobile termination block is configured to transmit a sequence of pilot preambles and traffic channel requests with increasing power until the traffic channel request is acknowledged by the base station or the sequence ends.

In an analogous art, Odenwalder discloses a method for reducing peak to average transmit power in a CDMA system (abstract). Odenwalder further teaches that during the initial acquisition of the reverse link signal the power of the pilot channel may need to be increased to facilitate detection and synchronization at the base station (column 9 lines 29-55).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to incorporate the increase power of the pilot signal, as taught by Odenwalder to the system of Tiedemann. The motivation for doing so would be to facilitate the detection and synchronization at the base station.

9. **Claims 55-56, 58-59** are rejected under 35 U.S.C. 103(a) as being unpatentable over O'keefe et al. (hereinafter "O'Keefe"; U.S. Patent Number 5,381,464) in view of Tiedemann.

Regarding **claim 55**, O'Keefe discloses a mobile termination block configured to receive page messages via a control channel sent by at least one base station; and

a processor configured to determine whether one of the page messages is addressed to the apparatus, select a reverse link access channel to transmit a traffic channel request whenever the processor determines a page message is addressed to the apparatus (columns 1-4, specifically lines 27-51 of column 2), wherein the mobile termination block is configured to transmit the traffic channel request to a base station using the selected reverse link access channel (columns 1-2, specifically lines 27-51 of column 2). However, O'Keefe does not explicitly disclose that the mobile station transmits data on a traffic channel identified by a mobile station identifier before receiving a channel assignment from the base station. In an analogous art, Tiedemann discloses a multiple access in a wireless communication system, Tiedemann further discloses that the mobile station transmits data on a traffic channel identified by a mobile station identifier before receiving a channel assignment from the base station (column 1 lines 29-46).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to incorporate the dedicated reverse link, as taught by Tiedemann to the system of O'Keefe. The motivation for doing so would be to facilitate the detection and synchronization at the base station.

Regarding **claim 56**, Tiedemann further discloses that the mobile termination block further transmits a pilot preamble along with the traffic channel request to a base station using the selected reverse link access channel (figure 2 A, column 7 lines 3-12, figure 5, column 10 lines 15-29),

Regarding **claim 58**, Tiedemann further discloses that the processor is further configured to select a power control group from a plurality of power control groups for the mobile termination block to transmit data (column 9 line 25 to column 10 line 62).

Regarding **claim 59**, since the mobile station selects an access channel from a list of forward link channel assignment channel (column 4 lines 23-33), it is inherent that the list of access channels are advertised by the base station.

10. **Claim 57** is rejected under 35 U.S.C. 103(a) as being unpatentable over O'keefe and Tiedemann and in further view of Padovani et al. (hereinafter "Padovani"; U.S. Patent Number 6,574,211).

Regarding **claim 57**, the combination of O'Keefe and Tiedemann discloses the invention but does not disclose that the data transmitted on a traffic channel identified by a mobile station identifier comprises a data request channel (DRC) field. In an analogous art, Padovani discloses a method and apparatus for high rate packet data transmission. Padovani further discloses that the data transmitted on a traffic channel identified by a mobile station identifier comprises a data request channel (DRC) field (column 7 lines 18-48).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to incorporate the data request channel (DRC) field, as taught by Padovani to the system of O'Keefe and Tiedemann. The motivation for doing so would be to obtain the quality of the of the link channel in order to make the connection decision.

Allowable Subject Matter

11. **Claims 40-42, 44-45** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding **claim 40**, the applied references fail to disclose or render obvious the claimed limitations of claim 31 wherein the mobile termination block is further configured to transmit a data request channel (DRC) on the traffic channel after transmitting the pilot preamble and traffic channel request on the access channel.

Regarding **claim 45**, the applied references fail to disclose or render obvious the claimed limitations of claim 31, wherein the mobile termination block is further configured to transmit pilot channel information on the traffic channel after transmitting the pilot preamble and traffic channel request on the access channel.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonny TRINH whose telephone number is 571-272-7927. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward URBAN can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sonny TRINH/

Primary Examiner, Art Unit 2618

5/5/08